



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,552	09/26/2005	Henricus Hermanus Wilhelmus Thuis	821914-1020	7160

24504 7590 03/04/2008  
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP  
600 GALLERIA PARKWAY, S.E.  
STE 1500  
ATLANTA, GA 30339-5994

EXAMINER
----------

ZIMMERMAN, JOHN J

ART UNIT	PAPER NUMBER
----------	--------------

1794

MAIL DATE	DELIVERY MODE
-----------	---------------

03/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/534,552

**Applicant(s)**

THUIS ET AL.

**Examiner**

John J. Zimmerman

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/11/2008 (election).  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 and 23-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 and 23-26 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 5/10/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 20050926, 20070521  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **FIRST OFFICE ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse in the correspondence titled "RESPONSE TO RESTRICTION REQUIREMENT" received January 11, 2008 has been considered. In view of applicant's amendment to the pending claims to include the same special technical features in each group, the requirement for restriction mailed December 14, 2007 has been withdrawn. Pending claims 1-21 and 23-26 will be examined in this prosecution. In view of the withdrawal of the restriction requirement, applicant is advised that claims presented in a continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

### ***Priority***

2. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

### ***Information Disclosure Statement***

3. The information disclosure statements received September 26, 2005 and May 21, 2007 have been considered. Initialed forms PTO-1449 are enclosed with this First Office Action.

***Drawings***

4. The drawings filed with this application are accepted.

***Specification***

5. The disclosure is objected to because of the following informalities: Applicant may wish to replace the spelling "dyke" with the more conventional spelling "dike" or the term "wall" throughout the claims and disclosure. The use of conventional spellings and common terms facilitates the ability of others to find and access the concepts and other contents during text searches of any patent or printed publication that may result from this application. Appropriate correction is requested.

***Claim Rejections - 35 USC § 101***

6. Claim 14 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). See MPEP 2173.05(q).

***Claim Rejections - 35 USC § 112, Second Paragraph***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-21 and 23-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 14 provides for the use of a screen material, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. See MPEP 2173.05(q). It is unclear in what manner the screen material is used for the perforation of film material.

10. It is not clear in claims 1-21 and 23-26 whether the unequal thickness of the dykes (walls?) is a thickness variation in the vertical plane (thickness) or the horizontal plane (length x width) of the screen. It is unclear if applicant is claiming that the dykes (walls?) are higher in portions of the vertical plane or the dykes (walls?) are thicker in portions of the horizontal plane (i.e. higher walls or wider walls). If the dykes are higher in portions of the vertical plane, then it is unclear how the height would be unequal on only the side of the screen material opposite the flat side since the height of the dykes (thickness in the vertical plane) would be the same increment of measure regardless of which side of the screen it was viewed from. It appears that applicant may be describing that the height of the dykes (thickness in the vertical plane) may further project above the plane of the screen on only the side opposite of the flat side of the screen. Clarification is required.

11. It is not clear in claims 1-21 and 23-26 what "crossing points" constitute. It appears that applicant may be describing the "intersections" or "joints" of the dykes (walls?) of the screen.

***Claim Rejections - 35 USC § 102/103***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-2, 5-8 and 15 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Reinke (U.S. Patent 3,759,799).

15. Reinke discloses a metal screen material (e.g. see Figures 1-14) having a flat side (see reference numeral 17 in Figures 3-4) comprising a network of dykes (e.g. the wires of Reinke's screen) which are connected to one another by crossover points (e.g. see points where wires cross in Figures, 1, 6 and 12), which dykes delimit openings (e.g. see Figure 6; column 5, line 68 - column 6, line 23), the thickness of the crossing points not being equal to the thickness of the

Art Unit: 1794

dykes only on the side of the screen material opposite to the flat side (e.g. see thickness variations in regions of the screen in Figures 4 and 13). The material on the screen is electroformed (e.g. column 4, line 36 - column 5, line 24). The crossing points of the wires are at 90° angles as shown in Figures 6 and 12. The screen may be made cylindrical for use on a rotary press (e.g. see Figure 7; column 3, lines 23-25) and may be part of an assembly with a support (e.g. see Figures 8 and 10).

16. Claims 1-8 and 15 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinke (U.S. Patent 3,759,799).

17. Reinke discloses a metal screen material (e.g. see Figures 1-14) having a flat side (see reference numeral 17 in Figures 3-4) comprising a network of dykes (e.g. the wires of Reinke's screen) which are connected to one another by crossover points (e.g. see points where wires cross in Figures, 1, 6 and 12), which dykes delimit openings (e.g. see Figure 6; column 5, line 68 - column 6, line 23), the thickness of the crossing points not being equal to the thickness of the dykes only on the side of the screen material opposite to the flat side (e.g. see thickness variations in regions of the screen in Figures 4 and 13). The material on the screen is electroformed (e.g. column 4, line 36 - column 5, line 24). The crossing points of the wires are at 90° angles as shown in Figures 6 and 12. The screen may be made cylindrical for use on a rotary press (e.g. see Figure 7; column 3, lines 23-25) and may be part of an assembly with a support (e.g. see Figures 8 and 10). Reinke may differ from claims 3 and 4 in that Reinke may not require a thickness in the range of 20-250 microns and a difference in a range of 100-200

microns. Reinke, however, is making a printing screen and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use screen thicknesses and dimensions over any dimension ranges that might be appropriate for printing screens. It would have been obvious to one of ordinary skill in the art to optimize the thicknesses and dimensions of the screens of Reinke to best printing results depending on the quality and type of printing needed for a particular application.

18. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (JP 58-175237).

19. Suzuki discloses a metal screen material (e.g. see Figure 2) having a flat side comprising a network of dykes (e.g. the areas which delimit the openings 3) which are connected to one another by crossover points (e.g. the areas between the openings), the thickness of the crossing points (depending on how one defines the crossing points and the dykes in the Figure 2) not being equal to the thickness of the dykes only on the side of the screen material opposite to the flat side (e.g. see thickness variations in walls surrounding the openings 3 caused by grooves 13 in Figure 2). The crossing points of the dykes would appear to be at less than 120° angles as shown in Figure 2.

20. Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (JP 58-175237).



Art Unit: 1794

21. Suzuki discloses a metal screen material (e.g. see Figure 2) having a flat side comprising a network of dykes (e.g. the areas which delimit the openings 3) which are connected to one another by crossover points (e.g. the areas between the openings), the thickness of the crossing points (depending on how one defines the crossing points and the dykes in the Figure 2) not being equal to the thickness of the dykes only on the side of the screen material opposite to the flat side (e.g. see thickness variations in walls surrounding the openings 3 caused by grooves 13 in Figure 2). The crossing points of the dykes would appear to be at less than 120° angles as shown in Figure 2. may differ from claims 3 and 4 in that Reinke may not require a thickness in the range of 20-250 microns and a difference in a range of 100-200 microns. Suzuki, however, is making a mask and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use screen thicknesses and dimensions over any dimension ranges that might be appropriate for a picture tube mask. Regarding claim 7, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113.

22. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bennett (U.S. Patent 2,439,283).

23. Bennett discloses a metal screen material (e.g. see Figures 1-5) having a flat side (see Figure 5) comprising a network of dykes (e.g. the wires of Bennett's screen) which are connected to one another by crossover points (e.g. see points where wires cross in Figure 4), which dykes delimit openings, the thickness of the crossing points not being equal to the thickness of the dykes only on the side of the screen material opposite to the flat side (e.g. see thickness of the crossover points 8 verses the dykes (wires) in Figure 5). The crossing points of the wires are at 90° angles as shown in Figure 4.

24. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Marwick (U.S. Patent 661,615).

25. Marwick discloses a metal screen material (e.g. see Figures 1-2) having a flat side (see Figures 3 and 4) comprising a network of dykes (e.g. the areas which delimit the openings) which are connected to one another by crossover points (e.g. the areas between the openings), the thickness of the crossing points (depending on how one defines the crossing points and the dykes in the Figures 1 and 2) not being equal to the thickness of the dykes only on the side of the screen material opposite to the flat side (e.g. see thickness variations in walls surrounding the openings in Figures 3 and 4). The crossing points of the dykes would appear to be less than an apex angle of 120° as shown in Figures 1-2.

26. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugawara (U.S. Patent 5,312,694).

27. Sugawara discloses a metal screen material (e.g. see Figures 1-2) having a flat side (see reference numeral 1 in Figure 1) comprising a network of dykes (e.g. the areas which delimit the openings 4) which are connected to one another by crossover points (e.g. the areas between the openings), the thickness of the crossing points (depending on how one defines the crossing points and the dykes in the Figures 1 and 2) not being equal to the thickness of the dykes only on the side of the screen material opposite to the flat side (e.g. see thickness variations 2 in walls surrounding the openings 4 in Figure 1). The crossing points of the dykes would appear to be at right angles as shown in Figure 2. The screen may be made cylindrical for use on a rotary press (e.g. see Figure 7; column 3, lines 23-25) and may be part of an assembly with a support (e.g. see Figures 8 and 10).

28. Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hustler (U.S. Patent 4,226,686).

29. Hustler discloses a metal screen material (e.g. see Figure 4) having a flat side comprising a network of dykes (e.g. the areas which delimit the openings) which are connected to one another by crossover points (e.g. the areas between the openings), the thickness of the crossing points (depending on how one defines the crossing points and the dykes in the Figure 4) not being equal to the thickness of the dykes only on the side of the screen material opposite to the flat side (e.g. see thickness variations in different directions in the walls surrounding the openings in Figure 4). The crossing points of the dykes would appear to be less than an apex

Art Unit: 1794

angle of 120° for a grid pattern as indicated in Figure 4. Hustler may differ from claims 3 and 4 in that Hustler may not require a thickness in the range of 20-250 microns and a difference in a range of 100-200 microns. Hustler, however, is making a thin perforated sheet for combustion chambers and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use thicknesses and dimensions over any dimension ranges that might be appropriate for such a sheet. No factual patentable distinction has been found for the particular ranges presented in claims 3 and 4 since no specific screen article or use for the article is claimed. Regarding claim 7, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113.

### ***Conclusion***

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art made of record serves to further establish the level of ordinary skill in the art.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Rena Dye can be

reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John J. Zimmerman  
Primary Examiner  
Art Unit 1794

/John J. Zimmerman/  
Primary Examiner, Art Unit 1794

jjz  
February 18, 2008